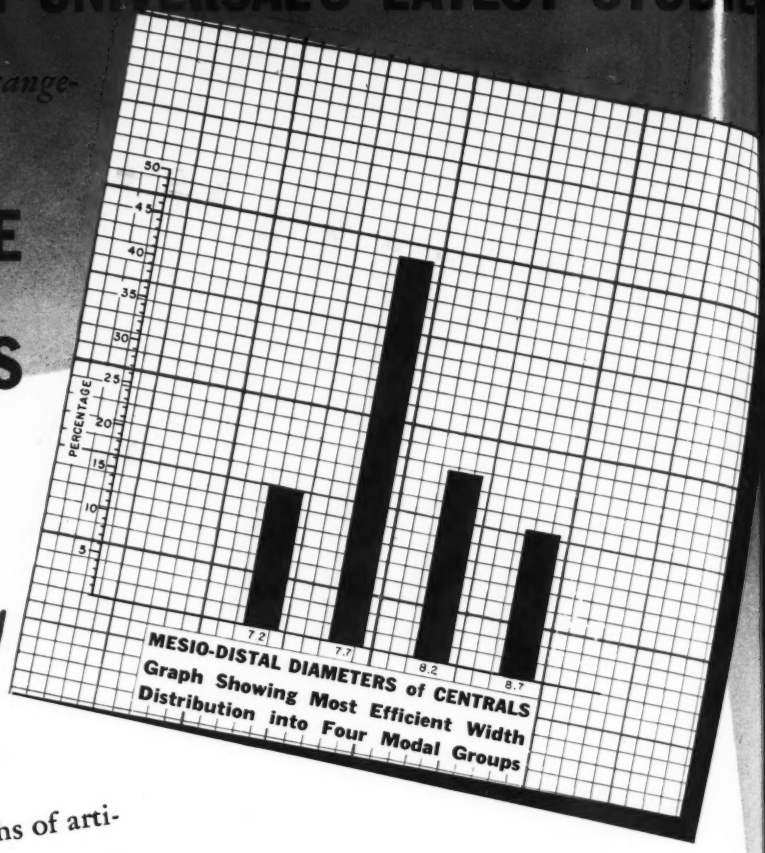
THE DENTAL

More FACTS FROM UNIVERSAL'S LATEST STUDIES

Used in determining the arrangement of tooth sizes for

VERI-CHROME FIVE PHASE ANTERIORS



Modal Groups

A survey, made of the widths of artificial central incisors, showed a range of from 6.8 mm. to 9.8 mm., which is very close to that of natural teeth. These widths were then plotted on a graph to study the distribution of the various sizes.

A scale of increments was determined that possessed maximum coverage with the minimum number of units. Four Modal Groups (shown in graph) *covered over 98% of all prosthetic requirements.*

The widths of the centrals from the four Modal Groups were used to determine the widths of the sets of Veri-Chrome Five Phase Anteriors.

This is part of the statistical study used in determining the arrangement of tooth sizes for Veri-Chrome Five Phase Anteriors—the system that simplifies selection and eliminates duplication.

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THE DENTAL Digest

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About Our CONTRIBUTORS

NEWMAN D. WINKLER received his D.D.S. in 1924 as Columbia University. He was an externe at Gouverneur Hospital from 1923 to 1925, assistant visiting dentist at Bellevue Hospital from 1925 to 1932, and has been associate visiting dentist at Fordham Hospital since 1932. Doctor Winkler is a general practitioner who in this issue adds to the growing literature on the use of plastics in dentistry.

L. TURNER RUSSELL, JR. was graduated from the Atlanta-Southern Dental College in 1938 with the degree of D.D.S. He is a general practitioner who also specializes in oral surgery, probably because he is, as Doctor Russell writes, "Doctor Jim Harpole's disciple," Doctor Harpole who is professor of oral surgery at Atlanta-Southern. In this issue Doctor Russell describes the open reduction of a fractured edentulous mandible by the use of a metal plate, the increased use of which for this purpose he believes is indicated.

IRVIN HENRY ANTE, D.D.S. of Toronto, is a graduate of ehe Royal College of Dental Surgeons (1914). In December of last year, Doctor Ante wrote for us about an IMPRESSION TECHNIQUE FOR THE EDENTULOUS MANDIBLE. This was followed in February of this year by a discussion of the IMMEDIATE DENTURE SERVICE. Doctor Ante now presents his IMPRESSION TECHNIQUE FOR THE EDENTULOUS MAXILLA.

A. HUBERT FEE, D.D.S. is an assistant professor of operative dentistry at the Medical College of Virginia School of Dentistry in Richmond.

SIDNEY S. SILVERMAN, D.D.S. is a graduate of the New York University College of Dentistry, the class of 1936. Doctor Silverman, who is in general practice, is one of the increasing number of dentist-photographers and in this issue offers some practical suggestions for those who wish to adopt this useful hobby.

Posterior Acrylic Inlays and Crowns

NEWMAN D. WINKLER, D.D.S., Bronx, New York

DIGEST

Methyl methacrylate resin (polymer and monomer), in tooth shades of the operator's selection, is recommended for posterior inlays and crowns. The indicated usage and advantages of this thermoplastic material are enumerated and illustrated by pictorial analogies. The precise technique is outlined with accompanying drawings to clarify important technical features.

METHYL METHACRYLATE resin (polymer and monomer) is an accurate thermoplastic material which is particularly adaptable for the making of inlays.

Armamentarium

The following is a list of the materials required in making posterior plastic restorations:

1. Acrylic powder (polymer).
2. Acrylic liquid (monomer).
3. Small mixing glass.
4. Cover glass.
5. Stainless steel burnishers, spatulas, etc.
6. Tin foil, gauge .001.
7. Quickstone and plaster, equal parts.
8. Small investing flask.
9. Small screw clamp.
10. Cellophane.
11. Medicine dropper.
12. Pink base-plate wax.

Technique

1. *Preparation*—The tooth is prepared in the accepted technique for gold restorations except that the margins may or may not be beveled. It must be borne in mind that greater bulk is necessary, so that the preparation must compensate for this.

2. *Impression-Taking*—The indirect method of impression-taking is preferable. It is also desirable to take two impressions. Two stone models are poured: one as a working model and one for finishing.

3. *Tin-Foiling the Model*—Tin-foiling the model is the most important step in the procedure and must be done with accuracy and care. A small thin strip of tin foil is burnished thoroughly on the floor of the preparation. An overall piece of foil is then burnished into the entire cavity, being carried well over all margins to cover the cavity completely.

4. *Waxing*—Pink base-plate wax is applied and when filled to sufficient bulk is pressed home with the fingers. Waxing is then completed. Occlusal margins and crevices should be well covered. A thin straight strip of tin foil is adapted around the tooth to cover all exposed surfaces except the occlusal, the upper edge of the foil to terminate exactly at the occlusal perimeter. Everything is covered with foil except the occlusal surface.

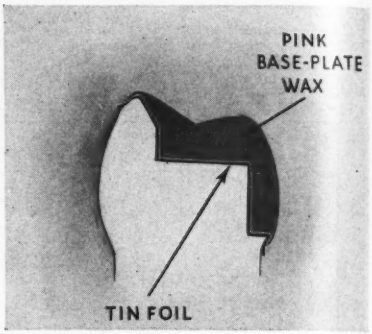


Fig. 1—Tin foil and pink base-plate wax applied to model.

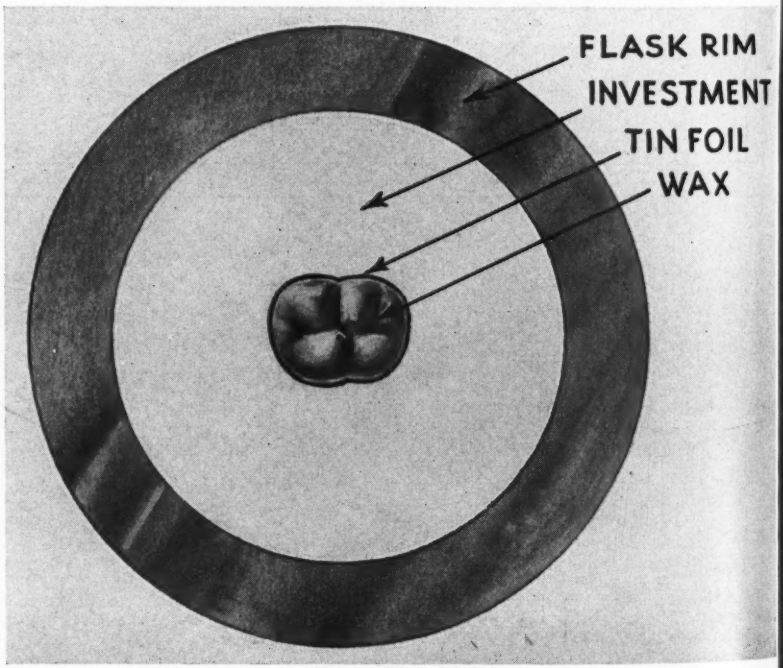
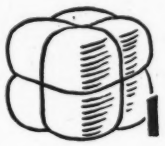
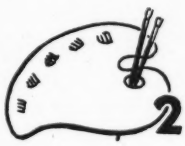


Fig. 2—Flask filled.

13 Advantages of Acrylic Inlays and Crowns



Acrylic inlays and crowns are preferable where bulk is necessary or required; where teeth have lost considerable structure, or for restoring occlusal contact.

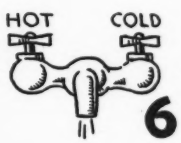


Esthetic effect is improved where gold would be visible or discoloration is present. Translucency aids color of tooth blending.

Acrylic withstands perfectly the stress of mastication and is self-regulative without fracturing or chipping.

Marginal preparation is not necessary. Tooth areas covered by wafer-thin margins retain their protection to tooth structure. Perfectly compatible.

On impact acrylic restorations eliminate the shock accompanying metallic substances.

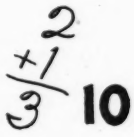


Thermal and static shock are eliminated.

Such restorations are light in weight.

The material is tissue tolerant. Margins can be safely carried under and in contact with mucosa.

On removal from mold, inlay requires minimum polishing.



Additions can be made as for interproximal contacts or other deficiencies.

Removal when necessary is simple because of the ease with which grinding is affected.

Net dimensional changes on curing are negligible. (W. T. Sweeney, et al.: Acrylic Resins for Dentures, J.A.D.A. 29:10 (January) 1942.)

In water-absorption tests acrylic shows loss of less than 0.1 per cent.

5. *Flasking*—Fill lower half of the flask with a soft mix of plaster and quickstone, wet the waxed model and insert with the occlusal surface on a level with the edge of the flask. Carry investment over all surfaces except the exposed wax surface. When set, trim excess to flask edge level. Adapt tin foil over the exposed wax surface, allowing excess coverage. Paint the exposed investment with castor oil. Pour the top half of the flask.

6. *Separating*—Separate flask, retaining occlusal tin foil in upper half. Boil the lower waxed half for five minutes.

7. *Selection of Shade and Preparation of Methacrylate Resin Paste*—Select the proper shade of methacrylate resin (polymer) powder, a small quantity sufficient for the size of the inlay or crown. The powder must be fine, or finer than 100 mesh. Add methacrylate (monomer) liquid with a medicine dropper until all the powder is absorbed and the liquid glistens on the surface. Mix thoroughly and allow to stand under cover for five minutes or until the mix becomes sticky. To prevent bubbles in the finished inlay, it is essential that powder and liquid be mixed thoroughly, before packing.

8. *Application of Plastic Mix*—Trim a 2 mm. channel around the hot mold; clean thoroughly, and apply the plastic paste to mold to excess. Cover with wet cellophane, close the flask with any press, and place in boiling water for about a minute. Open the flask, remove cellophane and excess plastic. Close the flask, press, place in cold water and allow to boil for exactly forty minutes. Remove and allow to cool. Separate, carefully split the model, peel off all tin foil.

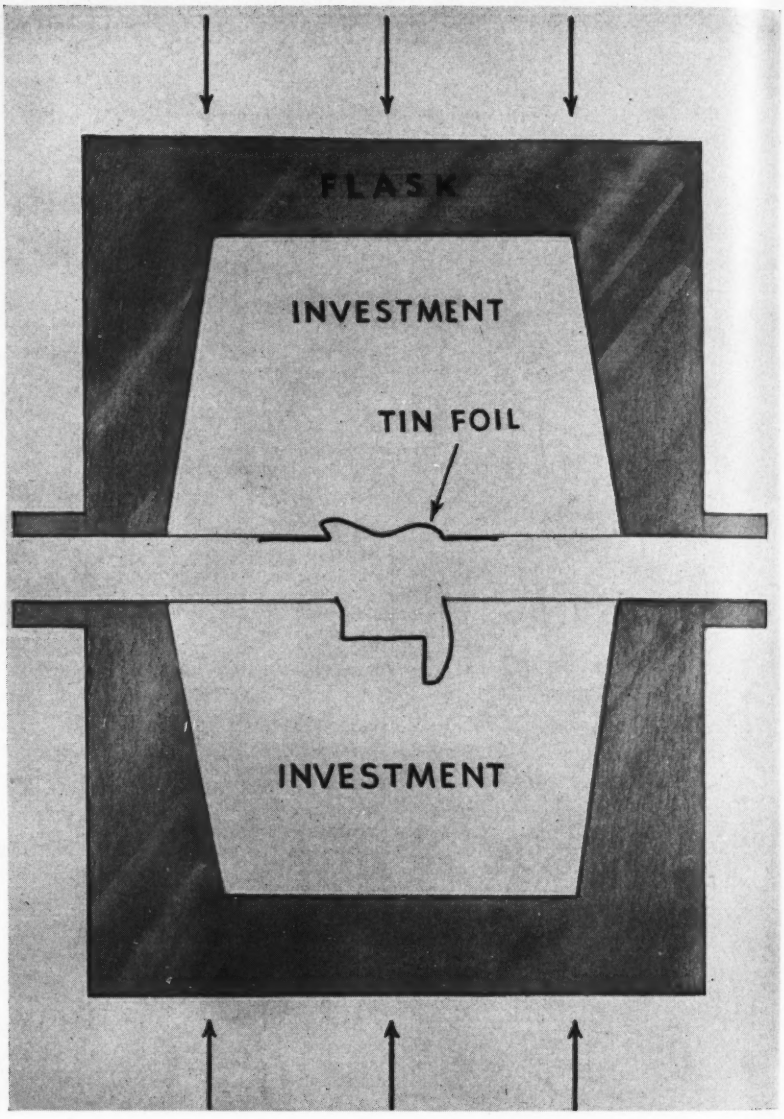


Fig. 3—Cross section of flask.

9. *Try-In and Finishing*—After the try-in there is usually no need for polishing except for slight occlusal correction.

10. *Cementing*—Any porcelain cement of proper shade is suitable.

2488 *Grand Concourse.*

Unsolicited Manuscripts

FROM TIME TO time THE DENTAL DIGEST receives inquiries regarding its attitude toward unsolicited manuscripts. These are especially welcome. There are many excellent dentists who have original suggestions, who have improved or modified a technique or have refined an operation; but these men do not contribute to the literature because they are afraid that they do not know how to "write." Dentists are not expected to be "writers." If they will tell their stories in a straightforward manner, the editors will be happy to cooperate with them in presenting their material. Unsolicited manuscripts sent to THE DENTAL DIGEST are read with care and open-mindedness and are reported on promptly. Note special announcement on page 187.

Use of Metal Bone Plate in Open Reduction of Fractured Mandible

L. T. RUSSELL, Jr., D.D.S., Murphy, North Carolina

DIGEST

A case is reported in which a chromium-cobalt-molybdenum alloy plate was used successfully in the open reduction of a fractured edentulous mandible. The circumstances and complete operative procedure are described.

Report of a Case

A MAN, AGED 43, of medium stature, presented with a fracture which resulted from a blow from a man's fist on the lower right side of the face.

Clinical Examination—The patient was edentulous on the right side with the exception of the lower first molar which on roentgenographic examination proved to be in the line of fracture. The molar was retained in a loosened condition in the short fragment and the line of fracture seemed to be directly in line with its mesial root. There was considerable displacement of the fragments owing to the muscular pull of the masseter and temporal muscles in an upward direction on the short fragment, with no occluding teeth to discourage the degree of displacement. The patient's upper jaw was edentulous except for a couple of teeth, and the lower jaw (after the lower right first molar was removed) contained only the six anterior teeth and the left first bicuspid.

Physical Examination and Preoperative Treatment—The patient was given a thorough physical examination at the hospital and was found to be in good health. He was admitted, put to bed, and an ice cap applied to the right side of the face for twelve hours continuously. He was given a hot saline mouth wash every hour and medication for pain. The swelling had completely subsided after the ice cap had been applied for twelve hours and the usual preparation was carried out prior to operation.

Surgical Procedure—The operation was performed under ether anesthesia.

1. An incision was begun near the symphysis, continued along the inferior border of the mandible, the knife going boldly down to the bone except for an area directly over the external maxillary artery, and ended at the angle of the jaw. The skin only was incised over the region of the external maxillary artery and anterior facial vein.

2. The numerous bleeding points were tied and by careful dissection the large facial vessels were found, ligated and divided.

3. The incision was then completed down to the bone.

4. The periosteum, the subcutaneous tissue and skin were retracted after having been raised by gentle blunt dissection.

5. The fractured fragments were then brought into apposition by manipulation with the fingers and held in place until a chromium-cobalt-molybdenum alloy plate, 1⅜ inches long, was put into position and the points for the three-eighth inch screws marked on the bone with a hand drill. These screw points were drilled just deep enough to allow the screws to be inserted without difficulty. The drilling and the actual fixing of the plate to the bone with the screws were accomplished with the firm grip of heavy forceps on the bone which held it securely in resistance to the pressure applied.

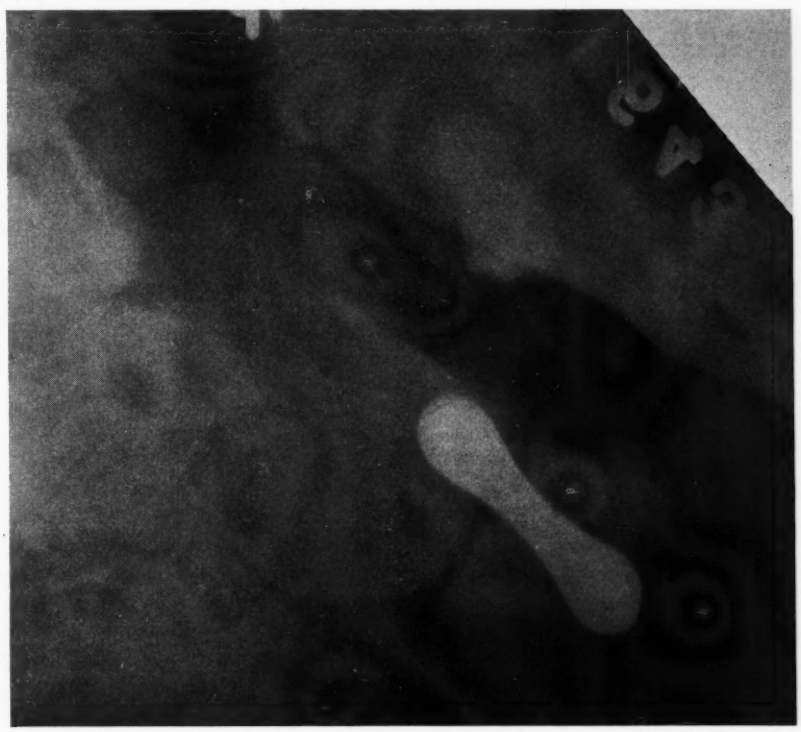


Fig. 1—Roentgenogram showing chromium-cobalt-molybdenum alloy plate in position.

6. The incision was closed without drainage. Catgut was used for the small incised portion of the masseter muscle and subcutaneous tissue; fine silk was used to suture the skin.

Postoperative Treatment and Course—The patient was given sixty grains of sulfathiazole daily for six days as a prophylactic measure.

I removed the skin suture in four days. There will apparently be only a minor scar.

The patient is showing good recovery and is comfortable because he is not handicapped by splints or wires in opening and closing his mouth.

Comment

Because the operation reported here was done only a short time ago, I cannot at this time give the final results, but so far the results point to the advisability of an increased use of chromium-cobalt-molybdenum plates in reducing edentulous fractures of the mandible.

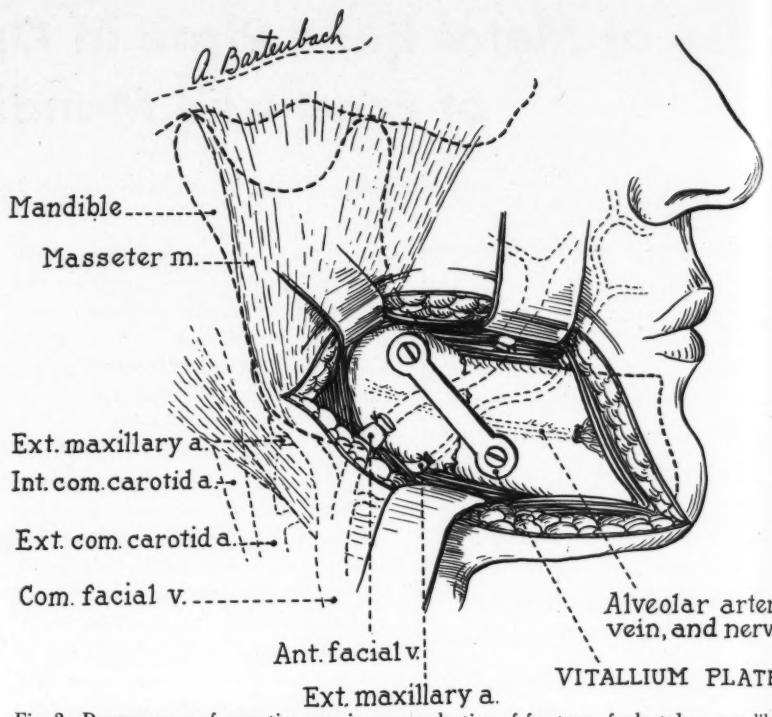


Fig. 2—Danger zones of operative area in open reduction of fracture of edentulous mandible. In making the incision, it is readily seen how important it is to avoid the external maxillary artery and the anterior facial vein.

Treatment of Gingivitis with Ascorbic Acid

H. GORDON CAMPBELL, L.R.C.P., L.R.C.S., L.D.S., and R. P. COOK, Ph.D., Dundee, Scotland

[Abstracted from The Dental Record 71:185 (June) 1941.]

AT THE Dundee Dental Hospital, during ten weeks' observation, 18 out of a total of 505 new patients were found to be suffering from gingivitis: 14 of these were treated with massive doses of ascorbic acid with favorable results; 4 failed to cooperate.

Clinical Features

The patient complains of painful and bleeding gums. The bleeding is usually spontaneous, but is worse when the teeth are brushed. In 10 cases there was marked lassitude.

On examination the gums were found to be red and congested. The area involved varies, but in most cases it extends from the gum margin upward or downward for a distance of from 8 mm. to 10 mm. On pressure the gums bleed readily, the blood flowing freely from the gum margin. In 2 cases severe sloughing of the gums was observed. The prompt bleeding of the gums on pressure is a valuable sign, as it provides a ready means of following the reparative process.

In no case could the gingivitis be attributed to trauma, calculus, or the administration of drugs. There were no other gross signs of a prescorbutic state.

Treatment

No dental treatment, such as scaling or the use of mouthwashes, was undertaken in any of the cases. On admission the patient was given 300 mg. of ascorbic acid. A specimen of urine was collected approximately six hours, or at the latest twelve hours, after this dose. The urine was tested for ascorbic acid by the dichloroprenol-indophenol indicator (Roche). The presence of 5 mg. or more of ascorbic acid per hundred milliliters of urine is taken to indicate adequate saturation.

The patient returns for inspection the following day, when a further 300 mg. of ascorbic acid is given. The urine passed after this dose is then tested. Even after one such dose a difference in the gum tissue can be observed. The pain has largely disappeared, and the red and congested area of gum tissue has shrunk to half the original size. The gums still bleed on pressure. During the first and second days of treatment some patients experience a tingling sensation in the gums. This is probably associated with the reparative process. The treatment is continued for a further four days. The amount of ascorbic acid found necessary to saturate the patients varied from 900 mg. to 4,200 mg. The

(*Continued on page* 188)

Impression Technique for the Edentulous Maxilla

IRVIN H. ANTE, D.D.S., Toronto

DIGEST

The best impression technique is one that produces dentures that are in harmony with the underlying tissues. As every mouth is different, no one technique can solve the difficulties of variations in anatomic form or function of the tissues supporting the dentures.

There are two fundamental principles to any good impression technique: first, the borders of a denture should rest on soft tissue in order to take full advantage of atmospheric pressure and to produce a peripheral seal; second, all dentures exert pressure on the underlying tissues and this pressure should be distributed according to the resiliency of these tissues. A technique is recommended in which these principles are applied. Twenty reasons for failure in impression taking are suggested.

Impression Materials

A GOOD IMPRESSION material should lend itself to easy manipulation, and always be constant in value. It should be a material that will record in detail, and under the proper amount of tension, the extreme functional position of the tissues. A material that meets these requirements is a low softening point compound, such as Kerr's, Mizzy's or Dresch's impression compound.

If the material is too soft the tissues will be placed on either too light a tension or none at all. If it is too hard, it will cause the tissues to be displaced beyond physiologic endurance.

The compound recommended here, is workable at low temperature, about 135

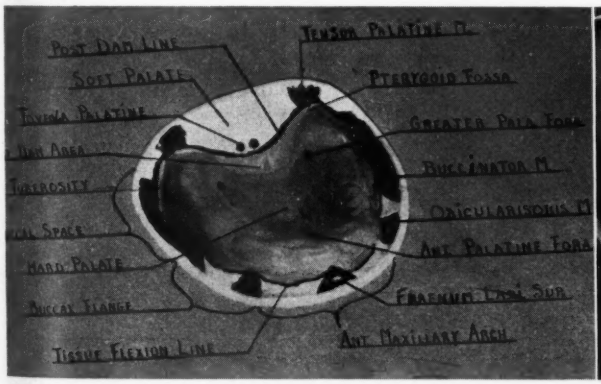


Fig. 1

Fig. 2

Fig. 1—A visual and digital examination of the mouth will give the operator a mental picture of the variations in resiliency and anatomic landmarks, thus warning him when modification in the impression technique is necessary.

The most important part to examine is that area in which the posterior border of the denture and the postdam area will be placed. The horizontal palate presents from 2 mm. to 5 mm. or more of the resilient tissue between the posterior border of the hard palate and the tissue flexion line. This tissue is capable of withstanding the postdam pressure and does not move when the patient says "ah."

The posterior denture line should be placed, whenever possible, anterior to the tissue flexion line or where the soft palate begins to move when the patient says "ah." Ordinarily, the two little dots (foveolae palatine) that appear on each side of the median line can be taken as a landmark for the posterior denture line, but this line should be determined in the mouth or by the actions of sucking and swallowing during the impression procedure.

To place the peripheral borders of an upper denture in soft tissue means to extend it into the buccal and labial cavities, passing posteriorly around the tuberosity and across the palate. The border should rest in resilient tissue and not on membrane, of which bone is the immediate underlying structure.

Fig. 2—The vertical palate is found when the posterior border of the hard palate is at the junction of the movable tissue of the soft palate which extends almost vertically downward and is known as the short throat form. In such cases the operator has two choices:

If he elects to place the posterior denture line anterior to the movable tissue of the soft palate, the postdam in the median line should not displace the underlying tissues inasmuch as it is nonresilient. In these cases the resilient tissues lateral to the hard palate should be included as a postdam area.

The other choice is to place the posterior denture line in the movable tissue of the soft palate. The postdam area is kept narrow and is placed over tissue capable of withstanding slight displacement.

Fig. 3—Two examples of vertical palate with both the posterior denture line and the postdam area placed upon the movable tissue of the soft palate. Extreme care should be exercised in establishing this area; otherwise the denture will cause gagging or be easily displaced when the patient yawns, coughs, or says "ah."

In the tuberosity area there is only one location that permits underlying tissue to carry a postdam pressure, and that is the pterygoid fossa between the tuberosity and the hamular process. The underlying tissue in this area is capable of withstanding displacement by the posterior border of the denture. If the denture border is too short in this area, it will rest on mucous membrane overlying bone on the tuberosity with insufficient resiliency to maintain the postdam seal. The result will be intolerable soreness.

Fig. 4—Examine the hard palate and determine its characteristics in regard to size, shape, extent, and apparent thickness of overlying mucous membrane. The hard palate must be relieved because of the non-resiliency of the overlying mucous membrane.

Only a few minutes with a ball burnisher or any other small, blunt instrument are required for the exact area to be relieved and for the amount of relief required to compensate for the settling of the denture. Determine where the non-resilient tissue ends and the resilient tissue begins. Indicate the outline of the hard area on the membrane with an indelible pencil, to be transferred later to the impression. Note: Often more relief is required on one side of the median line than on the other.

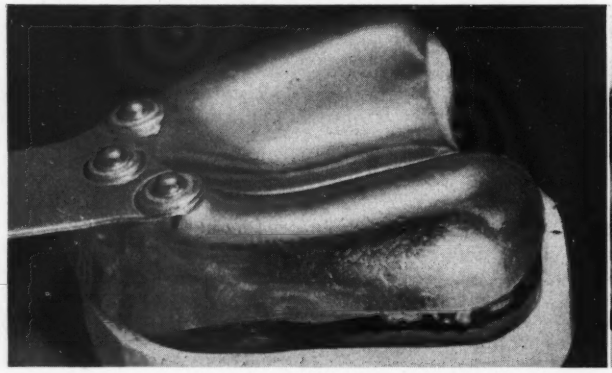


Fig. 5—Select a suitable size tray of flexible metal, such as Crescent numbers 1, 2, 3, 4 or 5. Trays 2 and 3 are the sizes used most. The tray is bent to approximate the form of the maxilla.

Fig. 6—Take an oversized modeling compound impression. Use any compound with a low-softening point. Secure an impression of the labial and buccal borders, the buccal portion around the tuberosities, and the posterior palatine area. Hold the tray with the middle finger in the center of the vault and instruct the patient to suck and swallow. This act will in most cases turn the softened compound down at the posterior denture line. It is anterior to this line that the postdam area is established.

If the tray is too long or too much compound is used, it will be difficult for the patient to establish the postdam line by swallowing and it will be necessary to locate the two little pits (foveolae palatine). These are situated in the center of the posterior border of the hard palate and are marked with spotex or an indelible pencil; also locate the two pterygoid fossae with a ball burnisher. They are situated to the lingual of the tuberosities. Draw a line from the pits to these notches. It is anterior to this line that the postdam zone is established.

Moisten the impression and reinsert it to transfer the markings to the impression. Remove it, and with a sharp knife, scrape a groove along the posterior denture line. Pour the snap impression and secure a cast. It is upon this cast that the tray is adapted to take the final impression.

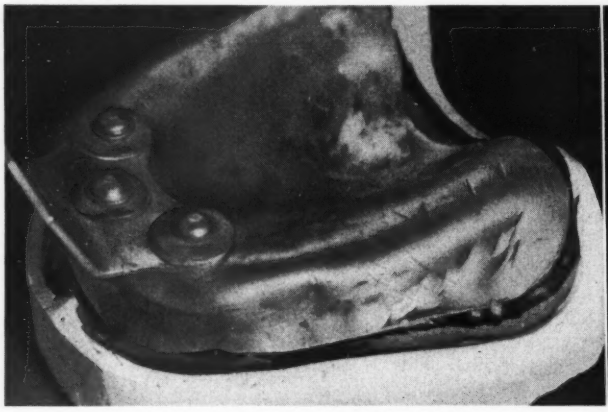
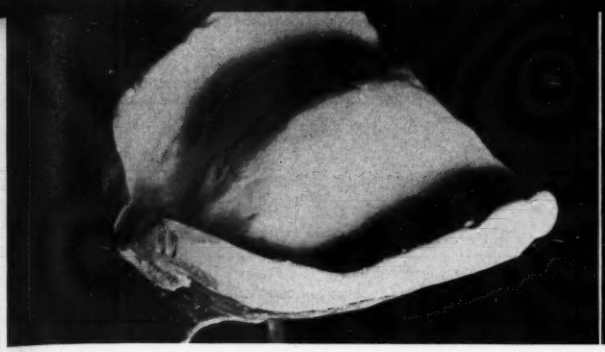


Fig. 7—Having obtained a cast, outline with a pencil the periphery just at the turn of the buccal and labial fold or the tissue flexion line. Select a close-fitting tray of flexible metal. Cut the handle of the tray selected to three-fourths inch in length and bend it down at right angles to the tray. Adapt the tray to the cast by bending with pliers and tapping to place with a horn mallet. Trim with shears to penciled and postdam line and smooth all rough edges. When one becomes expert the last steps might be eliminated by fitting the tray directly to the maxilla.

Place the newly adapted metal tray in the mouth for testing, and again make a careful digital examination of the entire area. The metal tray should be tested for a close adaptation to the postdam area. If necessary make further allowance for over-extension in all areas by trimming.

Fig. 8—Select a low-softening point impression compound, and soften it in water at about 135 degrees. The softened compound is placed on the tray and extended to cover the borders with a small roll. It is molded to approximate the form of the maxilla. Dip the tray in and out of hot water and press to the maxilla, upward and backward; remove and note if the compound is evenly distributed over the tray. No part of the tray should be exposed through the compound. Trim off all excess compound or add more of it where insufficient.



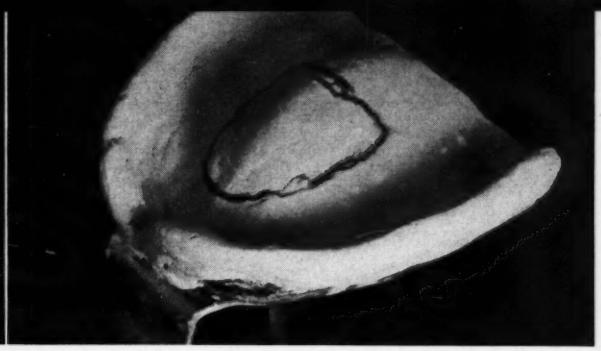


Fig. 9—Again soften all the compound in the 135 degree water. Insert it into the mouth and press firmly to the maxilla. Hold the tray with the middle finger in the center of the vault, and instruct the patient to open the mouth as wide as possible, attempt to whistle, grin, and then suck and swallow. At this stage the impression will often show a complete muscle-molded peripheral border and no further molding will be necessary. If, however, this is not accomplished, repeat the procedure until complete muscle-molding is secured. At no time should the operator find it necessary to reheat any individual section of the impression for the purpose of muscle-molding the periphery except possibly in the frenum area.

Fig. 10—Outline the hard areas in the mouth with spotex or an indelible pencil, and transfer the markings to the impression. Relieve these areas in the compound by scraping. Dry heat the relieved areas with torch; reseat the impression and press it firmly to the maxilla. Repeat this procedure until considerable stability is secured—and do not proceed further until stability is secured. At this stage relief should be established over both the anterior palatine foramen and the greater palatine foramina.

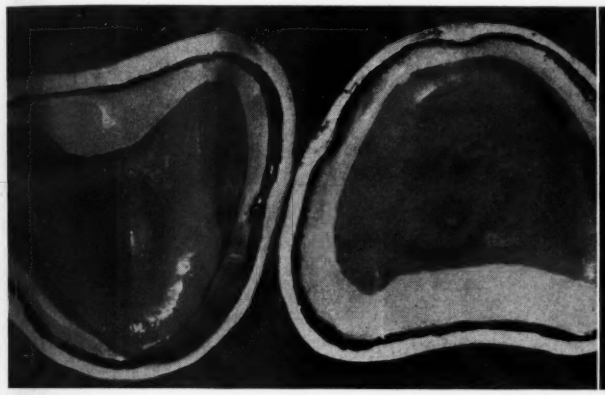


Fig. 11—If conditions are normal the denture has its periphery laid at the tissue flexion line; but when the ridge or tuberosities are greatly resorbed, it is often necessary to extend the borders of the impression onto the reflected mucosa of the lips and cheeks to secure added peripheral seal. These tissues should not be displaced beyond physiologic endurance.

Fig. 12—If normal facial contours are to be restored by plumping the denture in the labial or buccal areas, softened compound is added to the impression and extended upon the reflected mucosa. It is muscle-molded and shaped to give the desired facial contours before proceeding with the next step.

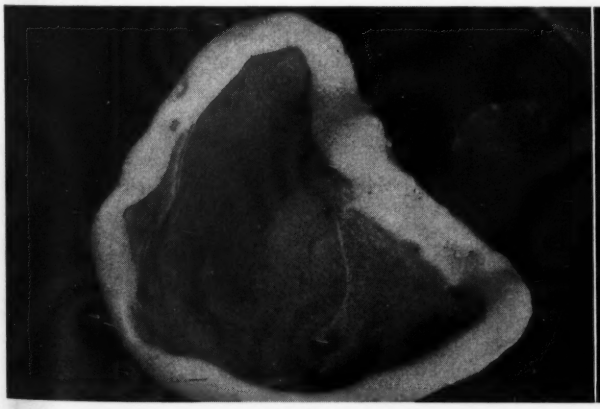


Fig. 13—According to the directions Jelenko's adaptol or Kerr's impression wax is softened, and strips of the softened material are placed along the buccal and anterior borders to cover about 3 mm. of the inside and outside surfaces of the periphery and along the posterior border to cover from 5 mm. to 10 mm. of the postdam area. (Caution: Do not use too much material.) For better results melt the plastic material and paint the surfaces mentioned with a thin film about 2 mm. thick.

Dip the impression in and out of hot water, 115 degrees; reseat it, and press firmly to the maxilla. Have the patient open wide, suck the finger; then swallow, grin, and try to whistle. Remove and chill thoroughly. Trim off any excess material. Reseat and test for stability by instructing the patient to say "ah" and repeat all exaggerated muscle movements. At this stage stability should be secured. If not, relieve the areas of over-extension by scraping where the plastic material is thin, exposing the compound. Flow melted material over these areas and, while it is soft, reseat the impression and repeat muscle movements of that area.

Fig. 14—The finished impression should present a smooth, rounded muscle-molded peripheral border of not less than 3 mm. in thickness, with adhesion and peripheral seal. The underlying tissues should not be displaced beyond physiologic endurance. The plastic material in the postdam area should not extend upon the greater palatine foramina.

REASONS FOR FAILURE

1. Failure to make a digital and visual examination and to recognize anatomic landmarks for modification in the technique.
2. Failure to fit the newly selected tray to the maxilla and to test it for over-extension, especially in the posterior palatine area.
3. Failure to use a low-softening point compound or to have it soft enough to cause minimum displacement of the resilient tissues.
4. Failure to familiarize oneself with an impression material that will record in detail and under the proper amount of tension the extreme functional position of the muscle tissues.
5. Failure to distribute pressure according to resiliency of the tissues and to produce a peripheral seal.
6. Failure to have the periphery laid in the resilient tissues with the labial and buccal flanges not too thick, too thin, too short, or over-extended; and failure to secure firm contact with the tissues in these areas.
7. Failure to lay the posterior denture line at the tissue flexion line, or to the movable tissue, when the patient says "ah."
8. Failure to have the postdam area on resilient tissue between the posterior border of the hard palate and the movable tissue when the patient says "ah."
9. Failure to extend the peripheral border into the pterygoid fossa between the tuberosity and the hamular process and not upon the mucous membrane covering the tuberosity with insufficient resiliency to maintain the postdam seal.
10. Failure to relieve the compound over hard areas covered with a non-resilient tissue until considerable stability is secured in the impression; failure forcibly to seat the impression to the maxilla during this operation.
11. Failure to use a soft plastic impression material on the periphery that is moldable at mouth temperature.
12. Failure to instruct the patient to exert exaggerated muscle movements on the softened peripheral compound and the plastic.
13. Failure to correct over-extended areas or add more material in soft tissue areas or in areas of insufficient extension.
14. Failure to extend the postdam area over and upon movable tissue in cases of a short vertical palate.
15. Failure to demonstrate to the patient how to perform all exaggerated muscle movements: open wide, laugh, whistle, suck, and swallow.
16. Failure to establish the peripheral outline and mold the compound to show definite muscle tissue markings, and failure to muscle-mold the plumped area of an impression.
17. Failure, when the ridge is greatly resorbed, not to extend the borders of the impression onto the reflected mucosa of the lips and cheeks to secure added peripheral seal.
18. Failure to remove surgically flabby tissues which impair stability.
19. Failure to master the art of impression-taking: depending on short cuts and impression materials to secure the desired result.
20. Failure to have the final results rest entirely on careful examination of the tissues, the operator's judgment and digital skill; and not on luck alone. (Don't take chances. Learn how.)

degrees; and when placed in the mouth rolls up over the flanges of the tray with slight pressure, causing a minimum of displacement or tension of the tissues.

Peripheral seal is necessary with a plastic material that is moldable at mouth temperature. It should stabilize and sustain the denture while lateral strains are being applied during mastication, and while the border tissues are undergoing functional movements. If possible, the impression base should be entirely complete before establishing the peripheral seal. Jelenko's adaptol or Kerr's impression wax are materials that meet this requirement.

The technique described with the accompanying illustrations is not entirely original. Valuable information has been incorporated from various sources. Credit is due to Doctors Green, House, Hall, Fish, H. L. Harris, and W. H. Wright for progress and advancement in this service.

918 *Medical Arts Building.*

The Editor's Page

We frequently encounter in practice, usually among women and children, a form of gingivostomatitis that does not have the appearance of Vincent's infection. It is acute in origin, painful, and the patient generally presents the picture of one who is acutely ill. Cahn and Bartels[1] would classify this condition as a manifestation of infection with the herpes simplex virus. In the same category of infection with this virus are found the herpes labialis (common cold sore) and the aphthous ulcer (canker sore). Herpes labialis, aphthous ulcer, and gingivostomatitis all represent tissue infection of the filterable virus. This virus, like all others, requires the presence of living tissue cells for its existence and cannot be cultivated on bacteriologic media in laboratories.

A disquieting feature of this condition is the persistence of this virus in the body in a dormant stage throughout life. Cahn and Bartels suggest that if a person is once affected by this virus, recurrent attacks are likely. When tissue resistance is high, the virus is latent. It manifests itself in virulent activity under the force of such stimuli and episodes of lowered resistance as trauma, menstruation, fever, and gastric upsets. In contrast to many other virus diseases, Cahn and Bartels point out that a definite immunity to herpes virus is of extremely short duration. Persons, therefore, who give a history of fever blisters, canker sores, or acute stomatitis should be told to expect recurrent attacks.

Wise and Sulzberger, cited by Cahn and Bartels, mention among the other stimuli, certain foods, such as nuts, fish, cheese, and chocolate, which sometimes initiate the attack. Exposure to sunlight may likewise be an inciting factor.

It is necessary for clinicians to keep in mind the differential diagnosis, distinguishing among the herpetic, the traumatic, and the syphilitic ulcers. The herpetic ulcer is exquisitely painful and is usually surrounded by a characteristic red halo. The traumatic ulcer, usually developing from irritation with the toothbrush, although painful, does not have the red halo, and the causal relationship can usually be traced. The mucous patch of syphilis is painless, has no distinguishing halo, and presents a moist surface. The presence of the *T. pallida* under dark field illumination is, of course, conclusive.

The differential diagnosis between herpetic gingivostomatitis and Vincent's infection is important. Vincent's infection usually attacks the interdental papillae and does not invade the remaining gum tissue. In herpetic gingivostomatitis, as described by Cahn and Bartels, the entire mucosa is congested and inflamed. There is a bogginess about all the intraoral soft tissues which is not generally found in Vincent's infection.

The treatment, as we all know, for the common cold sore, the canker sore, and acute herpetic gingivostomatitis is not satisfactory. The conditions are recurrent; the application of local drugs is rarely efficacious. Nature, however, is favorable to us, because the conditions are usually self-limiting and heal without complications despite our therapy.

Most of the chemicals in the pharmacopeia, including the newer sulfa drugs, have been applied. Cahn and Bartels are not enthusiastic about any of the methods of local treatment nor do they feel that the various vitamin preparations warrant emphasis in treatment. In discussing methods and medicaments in treatment, the authors quote the statement made by Scott, Steigman, and Convey: "The disease then appears to be self-limited, and conclusions as to the benefits of various therapeutic agents must be based on this knowledge." In short, the disease clears up spontaneously after running its course—despite treatment.

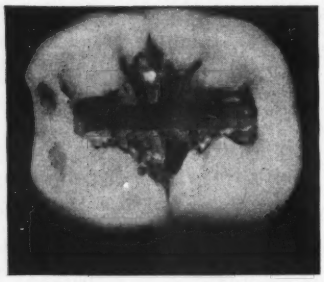
Authors Cahn and Bartels further suggest that the disease should be approached from the angle of prevention, although they make no specific recommendations.

In general, we may properly say that if people follow the dictum of Osler: enjoy adequate and balanced nutrition, satisfactory elimination, and physiologic rest, they will go a long way toward resisting this syndrome as well as many others.

[1]Cahn, L. R. and Bartels, H. A.: Aphthae and Herpetic Gingivostomatitis, American Journal of Orthodontics and Oral Surgery, Oral Surgery Section, 28:140 (March) 1942.

A Technique for the Safe and Easy Removal of Old Amalgam Restorations*

A. HUBERT FEE, D.D.S., Richmond, Virginia



Technique:

Fig. 1—A channel cut from the distal to the mesial cavity walls, extending to the pulpal floor, completely halves occlusal amalgams. Auxiliary channels to the buccal and lingual cavity walls may be necessary where large undercuts are encountered. The segments, easily dislodged into the spaces provided, are removed from the cavity with cotton pliers.

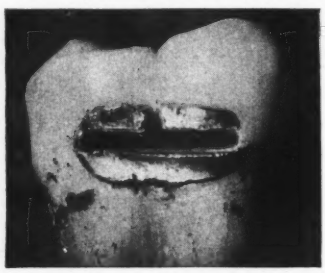


Fig. 2—Gingival amalgams are handled in the same manner as occlusal ones.

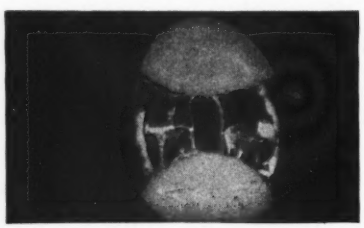


Fig. 3—Small MOD's are halved with a bucco-lingual channel through the neck of the restoration. A slight twist with an enamel hatchet will loosen the two halves, which can then be elevated from the cavity.

Fig. 4—Occlusal restorations with buccal or lingual extensions are prepared for removal by cutting channels as in Fig. 1, with an additional channel through the neck of the extension.

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*Reprinted, with slight rearrangement, from *Dentistry: a digest of practice*, 2:188 (Insert), November, 1941. Permission granted by the publishers, J. B. Lippincott Company.

DIGEST

"Old amalgam restorations can be removed safely and easily by the following technique [see accompanying illustrations] which saves the dentist's time and material, and eliminates unnecessary irritating factors for the patient.

"All channels must be cut entirely through the amalgam to tooth structure so that the segments can be dislodged without resorting to force to fracture them. The No. 3 round bur cuts efficiently; will not clog; produces little heat or vibration, but will provide adequate space for segment dislodgment in the average case. These procedures should be carried out with the teeth either under the rubber dam or isolated with cotton rolls to provide better vision and to facilitate the easy removal of bur cuttings."

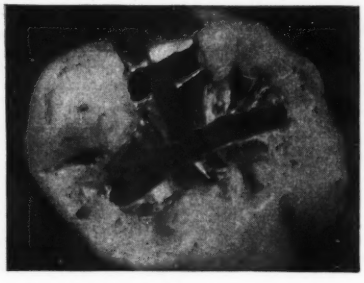


Fig. 4

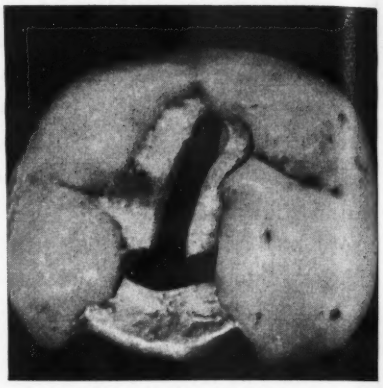


Fig. 5—MO or DO amalgams are severed at the occlusal neck with a bucco-lingual channel. An additional channel, cut from the bucco-lingual one to the mesial cavity wall, is necessary for the removal of the occlusal portion . . .

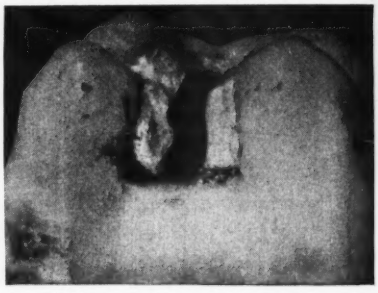


Fig. 6—The proximal segment of the tooth in Fig. 5 is removed to demonstrate the extension of the mesio-distal channel entirely through the amalgam to the pulpal floor of the cavity.

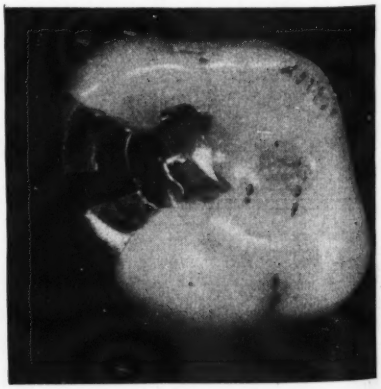


Fig. 7—MO or DO restorations with channels cut as in Fig. 5. Large undercuts under the buccal and lingual flares necessitate the halving of the proximal segment occluso-gingivally. The occlusal segment will be halved as in Fig. 5 for its removal.

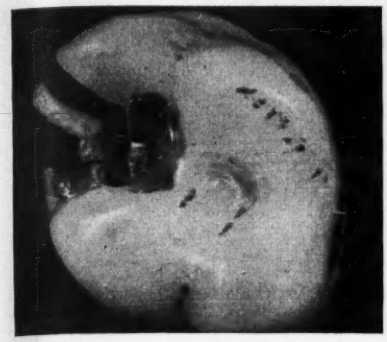


Fig. 8—The same tooth as in Fig. 7 showing the lingual dislodgment of the buccal segment of the proximal portion. The lingual segment will be dislodged buccally, and then the occlusal portion will be removed.

Fig. 9—An MODL is completely severed from the mesial gingival seat to the distal gingival seat, with an auxiliary channel cut through the lingual neck. Note that some of the segments are already loosened from the cavity walls.

Fig. 10—The distal proximal segments have been removed, and the mesio-lingual segments dislodged before elevating it from the cavity.

Fig. 11—The remaining buccal segments are dislodged and waiting for their removal. The two lingual portions will be dislodged by applying leverage in the channel of the lingual neck.

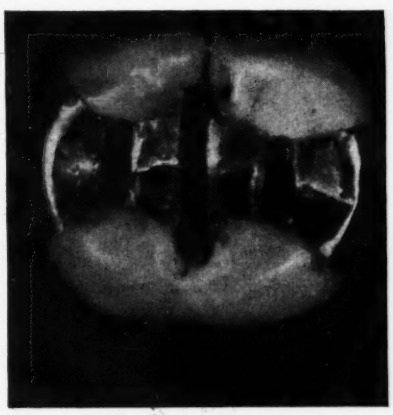


Fig. 12—Mesial, central, and distal channels usually are all that are necessary for the removal of MOD restorations in lower molars. Should large undercuts be present, it may be necessary to sever the entire restoration with a mesio-distal channel.

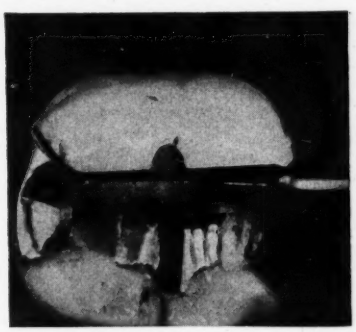


Fig. 13—The mesial segment is being dislodged from the proximal walls by the leverage action of an enamel hatchet.

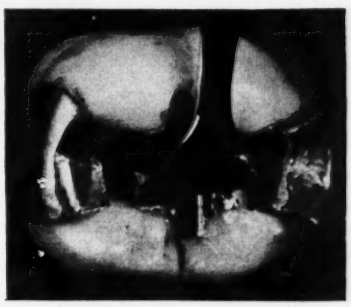


Fig. 14—The dislodged mesial segment is being elevated occlusally from the cavity with an angle of the "48" chisel.

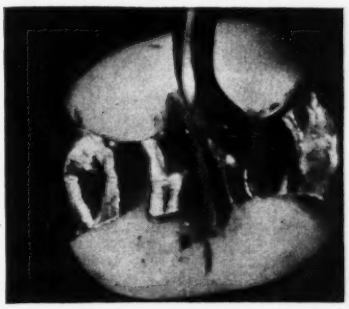


Fig. 15—The extreme distal segment is being dislodged with a thrust or tap from a straight chisel.

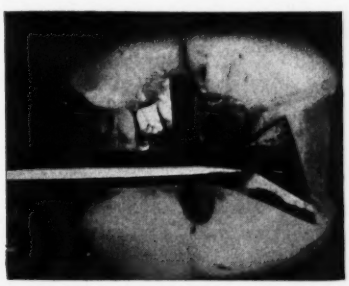


Fig. 16—The mesial segment of the distal half is being dislodged into the central channel with a pulling motion on the side of the "48" chisel. The distal segment of the mesial half will be loosened distally when the above segment has been removed.

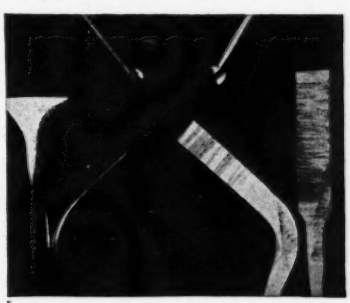


Fig. 17—Instrumentarium: Two No. 3 round burs, one for the handpiece and the other for the contra-angle, a pair of large enamel hatchets, a heavy straight chisel, a "48" chisel, and possibly a hand mallet are the only instruments necessary to carry out the technique in any part of the mouth.

Medical College of Virginia School of Dentistry.

Simplified Color Photography in Dentistry

SIDNEY S. SILVERMAN, D.D.S., Brooklyn

DIGEST

Dental photography as an aid in patient education, in recording the progress of treatment and clinical case presentations is becoming an increasingly important adjunct to dental practice. This is particularly so since efficient low cost cameras and natural color films have been available. The average practitioner, even with limited photographic knowledge, can, by observing a standardized procedure, make full color slides in his own office. How this can be done is fully and simply told.

UNTIL RECENTLY the equipment necessary for successful natural color dental slides was largely centered around a few foreign miniature cameras and accessories. These were the only cameras that had the flexibility to cover all ranges of dental photographic effort, intra-oral, teeth and adjacent tissues, full face, and profile views, by means of close-up focusing devices or ground glass viewers. Their expense precluded their use to many. Double-extension bellows cameras were a second best choice because their use was cumbersome and time-consuming, and not all were easily adapted for low cost color film.

Requirements of Photographic Equipment

For efficient dental photography in full color, several basic requirements must be met by the photographic equipment:

1. The equipment must be versatile enough to cover all ranges of work needed in dental photographs.
2. It must also be compact and easily set up, and as easily taken down.
3. A definite standardized procedure should be followed which is simple and sure and gives faithful color reproduction in every case with the least fuss and without disrupting the routine of the office.
4. The equipment should be of low initial cost and require a minimum cost per picture.

Equipment (Fig. 1)

1. *Camera*—American made Argus C3 camera with synchronized flashgun built in, standard f/3.5 lens is suggested.

2. *Camera Support* — Cast metal lamp base, which can be bought in any electrical supply house for less than $1.00, and an inexpensive tilt-top tripod head will be needed. This assembly is used as a camera support on the bracket table.

3. *Focusing Attachment* — Speedocopy, made for the Argus camera by D. Paul Schull, can be bought in any camera store. It was the recent advent of this attachment, formerly manufactured only for the Leica and Contax cameras, which made the inexpensive Argus comparable to the Leica and Contax for this type of work.

4. *Film*—Kodachrome type A (indoor) film is recommended.

5. *Lighting*—Photoflash bulbs used in the synchronized flashgun are advised for lighting. These are Wabash No. 0 bulbs, the smallest and cheapest bulb made.

6. *Accessories*—The accessories required are the following: an Eastman Wratten filter No. 2A and mount; cable release; wire cheek retractors; a so-called short lens tube (one-half inch in length) for close-up work, which is made by the manufacturer of the cam-

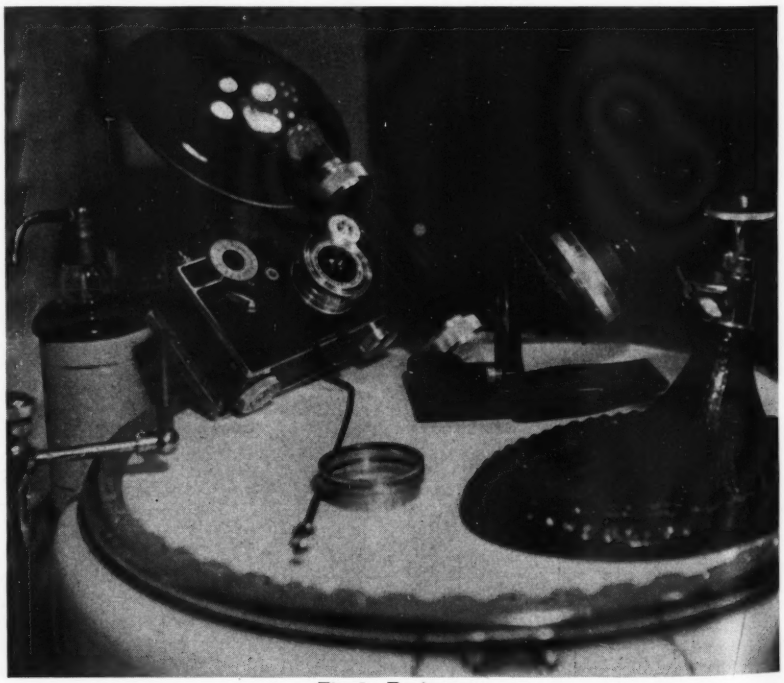


Fig. 1—Equipment.

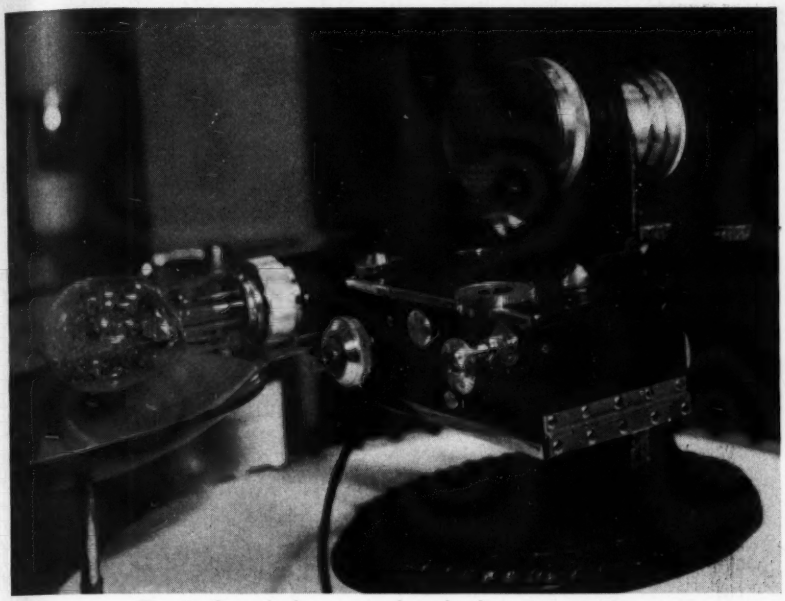


Fig. 2—Ground glass screen brought down into position.

era; and a low cost 35 mm. slide projector, or x-ray and slide projector.

The combination of the camera and flashgun, Speedocopy and camera support provides one compact, sturdy unit which always remains assembled.

The groundglass of the Speedocopy allows for critical focusing by moving the bracket table in or out, and rotating the lens. The subject is framed by moving the patient up or down in the dental chair. Extension tubes may be used for extreme close-up work or copying. Inasmuch as dentists usually want to make photographs showing the teeth and adjacent tissues, no extension tube, or at most, only the short one-half inch lens extension tube, will be required.

Kodachrome film has little exposure latitude. This means that all exposures must be within narrow limits if they are to give faithful color. Flat lighting is also preferred with Kodachrome. Both these factors are accomplished by the use of flashbulbs. Improper exposure of Kodachrome will result in thin (overexposed) or dark (underexposed) transparencies, improper color, and poor projection. It has been found that photoflood illumination loses a great deal of its lighting power as the age of the bulb increases; hence since the light is weaker, exposure must be greater to compensate. Photoflash bulbs, however, are constant in light output and color temperature and always are in the same plane, that is, at the camera position; therefore, each picture is correctly lighted and exposed, giving freedom from worry about exposure and eliminating retakes which are not found necessary until the film is returned from the processing laboratory, and then it is often too late for retakes to be convenient.

The synchronized flashgun allows for relatively short exposures, which eliminates any concern regarding patient movement, and makes the process of picture-taking quicker and a one-handed procedure.

Some may protest that flashbulbs are expensive, because one is used for each shot. That is why an exposure table was worked out for the No. 0 Wabash flashbulb. Consistently good pictures, proper color rendition, and ease of picture-taking, however, make up for the slight added expense.

The Wratten filter No. 2A corrects the tendency for the flashbulb at such close working distance to make reds and oranges too excessively blue. The filter must be in position over the lens when all pictures are taken. It is not necessary to exclude all daylight from the operating room while taking the picture. Subdued daylight is sufficient.

Procedure

1. With the camera loaded with Kodachrome type A film the assembly as a unit is placed upon the bracket table.

Fig. 3—Ground glass screen pushed up and camera back brought into position.

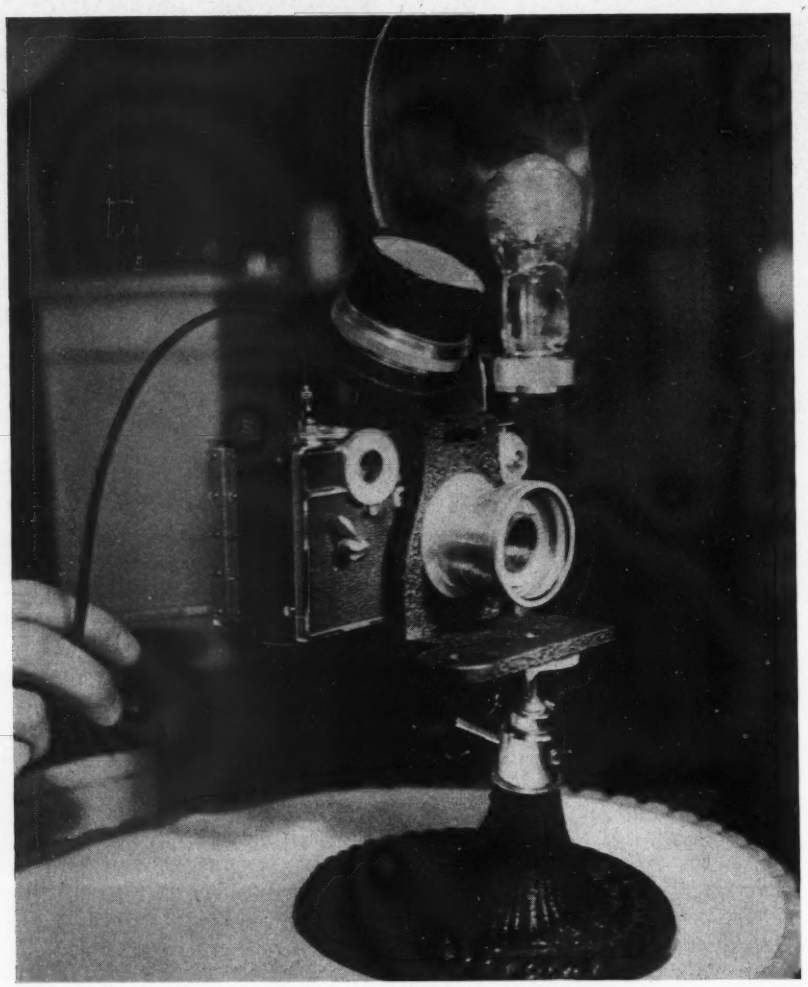


Fig. 4—Picture being taken by pushing cable release which clicks shutter and sets off flashbulb simultaneously.

2. The ground glass screen is brought down into position (Fig. 2).

3. The subject is framed by raising or lowering the chair, and sharp focus is obtained by moving the bracket table in or out. Focusing is best done with the lens aperture wide open at f/3.5.

4. When this is accomplished, a) the aperture is closed down to f/18; b) the filter placed over the lens; c) the shutter speed set according to the exposure data to be given; d) the ground glass screen is pushed up, and e) the camera back is brought into position (Fig. 3).

5. The picture is taken by pushing the cable release which clicks the shutter and sets off the flashbulb simultaneously (Fig. 4).

6. The entire assembly, after picture-taking (Fig. 4), is removed as a unit and stored away until the next exposure.

Exposure Guide

The exposure for the average dental picture is based on the No. 0 Wabash flashbulb in the synchronized flashgun at f/18 with Wratten 2A filter. The f/18 aperture allows for greatest overall sharpness and depth of focus. The filter is color corrective.

The average dental photographs will be taken without any lens extension tube or with the so-called short tube in position.

With no lens extension tube in position, the average area covered is from just above the eyes to the chin (Fig. 5). On this area the time is set at 1/30 second at f/18. This allows for the full intensity of the flashbulb to light the subject. This intensity is usually about 1/50 second. The method is preferable to the open-shutter-flash-close-shutter method.

For closer work, with the short lens extension tube in position, the area included is from below the nose to just above the chin; or mainly the teeth, with just enough of the lips showing for proper framing of the picture (Fig. 6). The exposure here is 1/100 second at f/18.

Warn the patient to close his eyes and to expect the flash. There is little danger of the flashbulbs' shattering as they are coated to protect against shattering; however, if additional safety is desired, a flashbulb protector of clear

Fig. 5—Average area covered when there is no lens extension tube in position. This and Fig. 6 were enlarged and reproduced from Kodachrome transparencies.

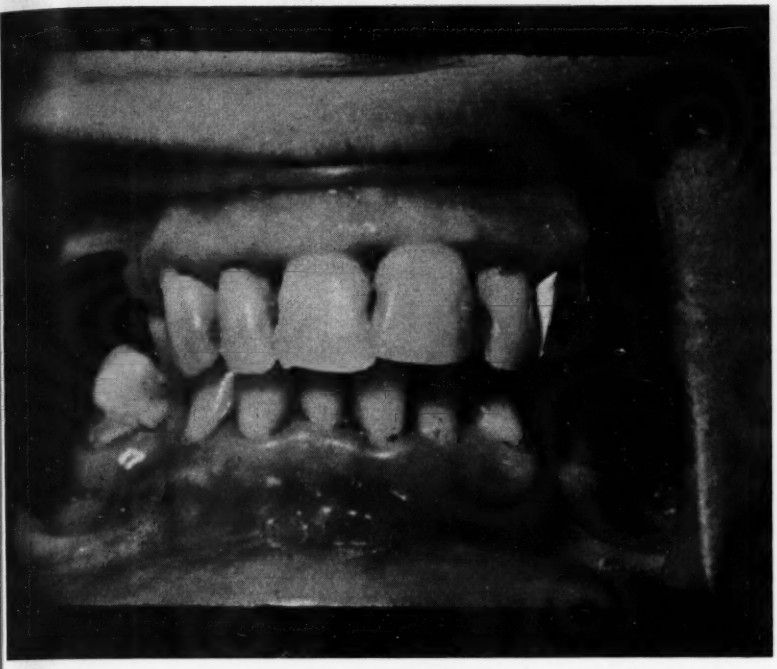


Fig. 6—Area included when the short lens extension tube is in position.

celluloid may be obtained and slipped over the bulb. The protector does not affect the exposure. I have not yet had a flashbulb shatter.

Comments

This procedure takes less than two minutes' time, and the entire operation is simple, quick and sure. This method gives color slides of accurate color, and sharpness of detail. No developing or enlarging is necessary, as this film is sent to Eastman Kodak Company for developing and is returned as a slide ready for projection. These slides should be mounted in glass to deter the fading of colors, and protect the film.

Color prints can now be made or black and white enlargements, if either is wanted. This is time-saving for those who have little time or facilities for making prints. For those who prefer to do their own work, black and white negatives may be taken instead of color, or may be made from color transparencies as in the case of Figs. 5 and 6 shown here. The expense for a black and white enlargement is almost as much as a color transparency, and color differentiation is essential in certain types of dental photographs.

This equipment will give color transparencies comparable to the best obtained by expensive foreign cameras at a cost for the entire outfit about one-half that of the foreign camera alone.

The same equipment can be used for copying, microphotography, and, without the focusing attachment, can be used as a standard camera for outdoor, indoor, sports or candid photography with excellent results.

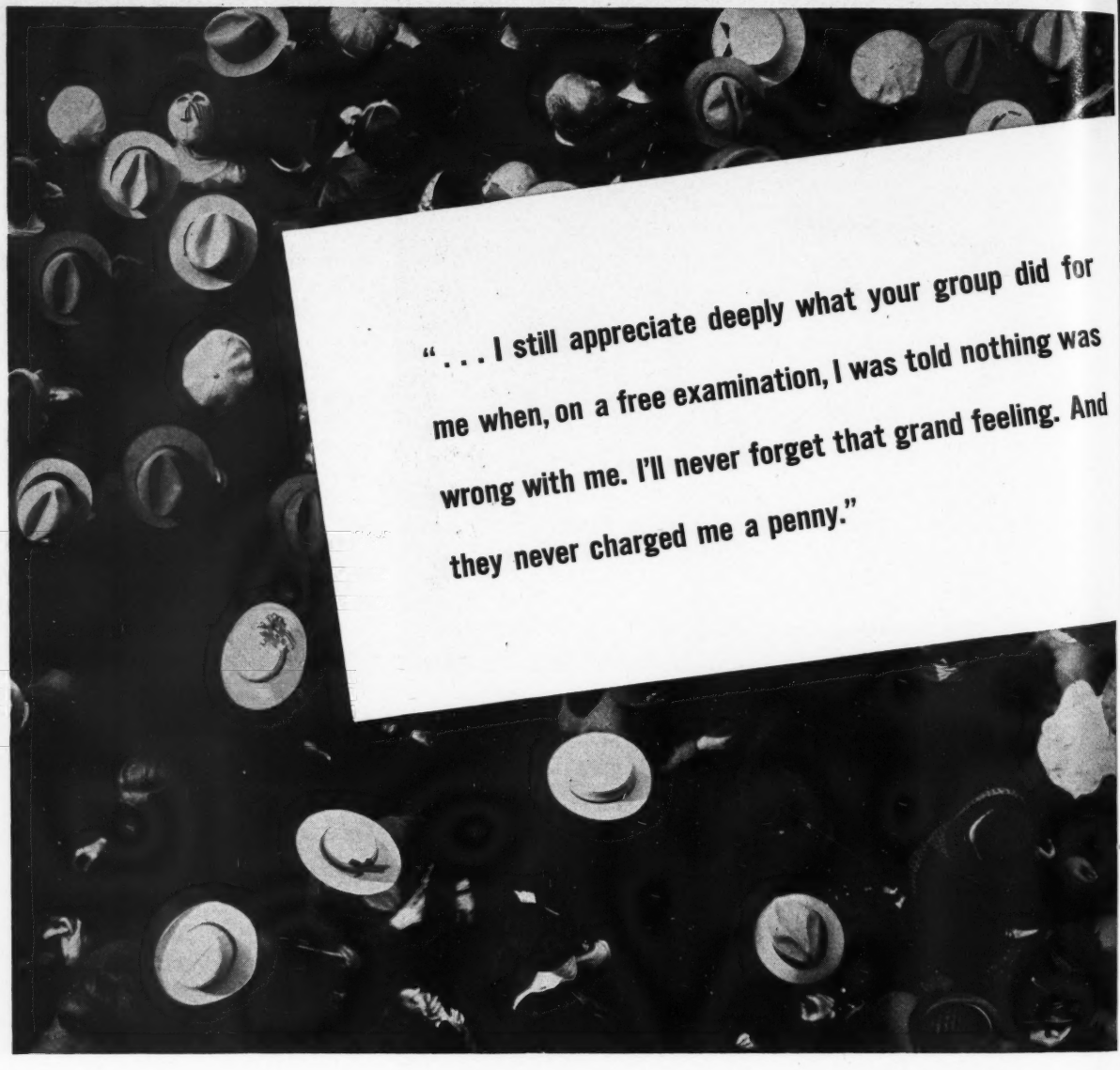
With the routine described here and the inexpensive equipment easily obtained in any locality, there is no reason why every dental office should not have the advantages of beautiful color slides for patient education, records, lecture material, and the practice-building procedures to which Kodachromes lend themselves.

1675 *Seventy-Ninth Street.*

ATTENTION DENTAL WRITERS!

To stimulate dental writers during the war, THE DENTAL DIGEST is offering United States Defense Bonds to authors. Twice each year, in January and July, the best article published in the preceding six issues will be selected by vote of the readers of this magazine, and not by a board of editors or judges. The author of the article receiving the largest number of votes at the end of each six-month period will be awarded a $100 UNITED STATES DEFENSE BOND. The first award will be made on July 15, 1942.

Illustrated articles of a practical, clinical nature, of the type usually seen in this magazine, are most likely to receive publication. The publication of material is as always at the sole discretion of the editor. Further details are given on page 187 of this issue.



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Awards will be made on January 15th and July 15th and the names of the winners will be published. The first award will be made on July 15, 1942. A suitable plaque indicating that the award is made by popular vote of the author's dental colleagues will accompany each Defense Bond Award.

This is not a contest in the usual sense, but an effort to encourage research, improvements in clinical practice, and advancements in the dental literature during a period of war when scientific and technical progress in dentistry might falter.

Illustrated articles of a practical, clinical nature, of the type usually seen in this magazine, are most likely to receive publication.

This invitation is open to all ethical dentists; it is effective immediately; it will remain open until further published notice.

You are invited to submit your manuscript to the Editor.

THE DENTAL DIGEST

708 Church Street, Evanston, Illinois

TREATMENT OF GINGIVITIS WITH ASCORBIC ACID

(*Continued from page* 174)

average dose has been 2,000 mg.

In most cases there was no bleeding from the gums on pressure after four days' treatment. The long-standing cases appear to be more refractory.

The statement that no bleeding occurs on pressure must be qualified to some extent, however, by remarking that even after the gum tissue has returned to its normal healthy consistency firm pressure will still provoke some bleeding from the interdental papilla between the lateral incisors and cuspids. For some unexplained reason this area heals slowly. It may be that this persistent bleeding is associated with lack of a factor that is capable of restoring capillary permeability to normal. Szent-Gyorgyi believes that the hemorrhagic lesions in scurvy are in part due to absence of vitamin P (hesperidin). Patients have all volunteered the information that they feel much better in general health, and their appearance certainly bears this out.

When patients are fully saturated and their gums are in good condition they are given a maintenance dose of 100 mg. a day. They return for inspection each week.

During the course of treatment by ascorbic acid no dental treatment whatever is given. We did not adopt the customary procedure of scaling or application of mouthwashes as we wished to confine our observations to the action of ascorbic acid alone. It is interesting to remark that in 7 cases the state of oral hygiene and of the teeth was poor indeed.

Results

1. The results would apparently indicate that lack of ascorbic acid is one important factor in the causation of such cases of gingivitis.

2. The large amounts necessary to saturate the patients are striking.

3. The disappearance of the lesion with continued administration of the vitamin must be more than fortuitous. As long ago as 1930 Hanke advocated the use of massive doses of orange juice in the treatment of gingivitis. He recom-

Step-by-step Illustrations Show You HOW!

The feature that makes Winter's "OPERATIVE ORAL SURGERY" most valuable to the dental practitioner is its truly excellent illustrative material. Winter not only tells HOW to deal with this or that condition—he SHOWS YOU HOW by means of clearly, finely detailed drawings. With 1019 illustrations Dr. Winter explains pictorially how to perform practically all the important procedures in operations within the oral cavity.

OPERATIVE ORAL SURGERY

By LEO WINTER, Professor of Oral Surgery, New York University; Director of the Oral and Minor Surgery Clinic, New York University College of Dentistry.

877 pages, 1019 illustrations, 5 in color.
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Since the active dental practitioner of today is already well-acquainted with pathology, bacteriology, etc., (essentials of successful oral surgery), this brand-new volume lays stress upon SYMPTOMATOLOGY AND DIAGNOSIS, WITH FULL AND DETAILED INFORMATION AS TO THE BEST METHODS OF TREATMENT.

For the sake of clarity, Dr. Winter does not attempt to give anything like a complete summary of the various methods of treatment that from time to time have been imposed. He describes only those methods which in his own experience have proved best—in other words, methods which have withstood the acid-test of actual clinical use. In discussing these Dr. Winter states exactly and in detail what he does under given circumstances. In many cases, of course, several methods of treatment are of equal value; however, the method which Dr. Winter has adopted is presented in complete detail.

All exceptional conditions are not mentioned, but ALL THE CIRCUMSTANCES WITH WHICH THE PRACTITIONER IS MOST COMMONLY CALLED UPON TO DEAL ARE THOROUGHLY COVERED!

Summary of Contents . . .

Introducing his subject, Dr. Winter first discusses examination of the patient. He then covers armamentarium and its care—including use of the new aero-Promayer lamp for treatment of postoperative pain or dry sockets; selection of an anesthetic; technic of injections, and anesthesia during oral surgery. Dr. Winter then takes up exodontia, advocating the use of forceps in the majority of instances, however, citing cases where forceps are not feasible and outlining procedures in which elevators, burrs, or the surgical route are used. A complete chapter is devoted to Root in Antrum. The chapter on impacted teeth covers surgical removal. In the chapter on sutures and ligatures, procedures are described and illustrated in such a way that nothing is left to your imagination. Pain, differential diagnosis of swellings of the face and neck, blood dyscrasias and their oral manifestations, healing of wounds, and draping of patient for surgical operation are thoroughly discussed and pictured in separate chapters.

220 Pages on Fractures

The coverage of fractures is particularly complete and includes: Fractures of the Maxillae; of the Zygoma or Zygomatic Arch; of the Mandible. Management of these fractures is given fully, including the wire splint, intermaxillary wiring, and extraction of teeth in the line of fracture and fracture in edentulous mandible. Fracture of the Symphysis, the Ascending Ramus and Coronoid Process are covered. Preoperative considerations, repair of fractures, preoperative sequelae, re-fracture, non-union and bone graft, etc., are described and illustrated. Over 240 drawings, photographs, and x-rays illustrate this section.

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mended one pint of orange juice daily for long periods—up to a year at least. This amount of orange juice contains approximately 300 mg. of ascorbic acid and possibly other compounds. He attributed his excellent results to the presence of vitamin C.

Contra-Angles

Important Statement from President Oliver of the A.D.A. under Date of March 25 . . .

"The most prominent questions in the minds of all dentists are: 'How can I best be of service? Where can I best serve? How can I associate myself with the appropriate agencies?'

"During the last several weeks, I have been intimately associated with the officials of the Procurement and Assignment Service for dentists, physicians, and veterinarians. This Service represents the personnel office for every dentist in America with reference to his utilization in the national emergency. The Procurement and Assignment Service is the Agency through which requests are made for dental personnel for the Army, Navy, U. S. Public Health Service, and the Civil Service agencies, including the Panama Canal, Indian Service, Children's Bureau, U. S. Veterans Administration, and many others. From the files of the Procurement and Assignment Service, lists of dental practitioners who are willing to become dislocated for the duration of the war into localities where expanding industries demand attention for the industrial and civil populations will be processed through that office. It is, therefore, urged that every dentist associate himself with the national emergency by enrolling with the Procurement and Assignment Service. I am told that enrollment forms will be mailed from the

Army, Navy, Industry Place New Demands On Country's Dentists

Dentists Would Rehabilitate Many Rejected Army Recruits

You're In The Headlines Now!

REJECT 20% DRAFTEES FOR DENTAL DEFECTS

NATION DISTURBED OVER DENTAL DEFICIENCIES

● It took a war to do it, but at long last the people of America are alarmed over the state of the nation's dental health.

They are concerned over the number of recruits rejected because of dental defects. They have been rudely awakened to the importance of care of the teeth. They are conscious as never before of the need for a really thorough oral examination. And they know a thorough examination must include x-rays.

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Washington Office to every dentist in America during the first week in April, together with a short questionnaire.

"This program is entirely voluntary and presents, for the first time in the history of the dental profession, an opportunity for the profession, itself, to offer its services to the last man in such capacities as will make it possible for every dentist to be utilized in the best possible manner. The success of such a program depends on every person and especially on those who come within the Selective Service Acts.

"Congress has stated that any man under the age of 45 is subject to military service. Every man enlisting with the Procurement and Assignment Service is asked voluntarily to state that he is willing to serve in such capacities as are considered advisable. He will thus be given an opportunity to list his first, second, third, and fourth preference for assignment, whether it is military, governmental, industrial, or civil.

"Men under 45 under the Selective Service System are thus afforded the opportunity of identifying themselves in such manner as will assist them in procuring commissions, rather than having to serve in non-professional capacities as enlisted men. When we realize the importance of being able to meet the military needs by the support of such agencies as the Procurement and Assignment Service, it becomes apparent that this is the scientific and correct method of utilizing the dental profession in the capacities for which it is best qualified to serve.

"I am told that at present the needs of the Navy Dental Corps are for dentists under the age of 32 and for the Army Dental Corps, for dentists under the age of 36. Such persons who are now desirous of entering the Navy should communicate with their Naval District Commandant and those who wish Army Service should write to the Procurement and Assignment Service requesting application forms. The Office of the Surgeon General of the U. S. Army has recently announced that dentists placed in Class 1-A by their local induction boards will be given an opportunity to make application for commission, thus providing that those who are qualified physically and profession-

IF YOUR DENTAL DIGEST WAS LATE

Maybe your copy of March DENTAL DIGEST didn't reach you at the customary early date last month.

Just before mailing was completed, a strike was called at our printers' plant which halted all operations for four working days. The question of a closed shop was the only issue involved.

The March numbers of all four Oral Hygiene Publications were affected. This number may also be a little late, but, at this writing, we are trying to catch up through overtime work.

ally may serve in a professional capacity as commissioned officers. Men in this category should write immediately to the Procurement and Assignment Service with a view toward commission. I believe that they will find that a letter from the Procurement and Assignment Service acknowledging receipt of the forms will be acceptable to the local induction boards as a cause for deferment until decision has been made by the Army as to whether the person is qualified for commission. Those who are qualified may expect to be commissioned. Those who do not qualify will be turned back to the local induction boards for final disposition.

"The dental profession has been afforded this opportunity to meet the military needs of the nation on a voluntary basis. Your participation is necessary if the military needs are to be met without the necessity of legislation. Collaboration with the Procurement and Assignment Service is the dental profession's way of saying that the national needs can be satisfied. I know that the profession will not fail in this critical challenge."—*Oren A. Oliver, President, American Dental Association.*

Nice Weather We're Having . . .

This is a form of salutation, a bromide of conversation, a military ally, a business contingent, a determinant of comfort and well-being, a factor in the choice of apparel, in the selection of food, in the taking of trips. The weather is always with us for better or worse and interest in it has never lagged even after a famous American humorist coined a witticism about the fact that everybody talks about it but nobody does anything about it.

These days, discussion about the weather may also be an expression of sabotage or the mutterings of a fifth columnist, because there are wartime regulations about it. The curtailment of some forms of weather-reporting, however, seems unwise. The theory is good; namely that to report weather conditions over the radio or in the press might give the enemy some valuable meteorologic information. We can be pretty sure, though, that the enemies with their diabolic preparedness have arranged for their own weather report-

(*Continued on page* 197)

Educational Material For PATIENT DISTRIBUTION . . .

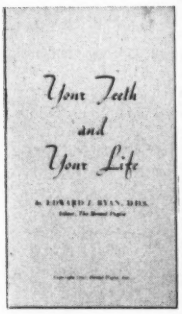
ethical . . . instructive, economical

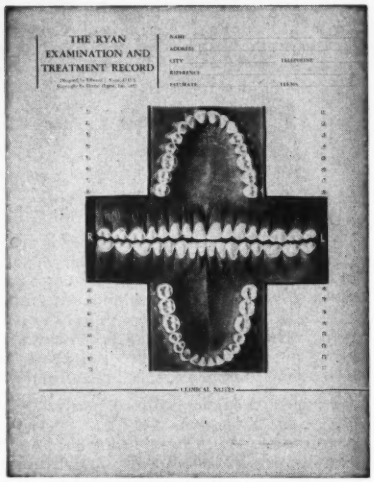
USE CONVENIENT ORDER FORM BELOW

The complete edition of *Visual Education in Dentistry* comprises 30 charts, most of which are printed in full color. The charts are invaluable in your patient-education program; ideal for use at the chair; effective material for your reception room table. If you have never had a copy, or if your present copy is badly worn, you are entitled to the complete edition at the special subscriber price of $1.00. *The coupon below is for your convenience.*

•

The new booklet, *Your Teeth and Your Life*, illustrated here, is intended primarily for patient distribution. It is written entirely in lay language. Charts tell the essential story. Many dentists are using it (1) as a monthly statement enclosure; (2) in the reception room; (3) as an enclosure with patient recall cards, etc. Prices, 25 for $1.00; 100, $3.00. *The coupon below is for your convenience.*





The Ryan Examination and Treatment Record Chart is extensively used throughout the profession—also in many institutions where essential records are required. The chart is often referred to as the most practical one ever offered. Aside from offering a permanent record of cases the charts have been found to have a definite informative value in explaining conditions to patients. Price, $1.00 per pad of 50 charts. Standard 8½ x 11 size. *The coupon below is for your convenience.*

20 *Reasons for Dental X-Rays* is a four-page pamphlet of common cases revealed only by the x-ray. It is available now because of a great demand for this material by dentists everywhere. It is a worthy addition to the other visual material referred to on this page. Prices, 100, $6.50; 200, $10.00. *The coupon below is for your convenience.*

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Each of the items listed on this page is strictly ethical, and worthy of consideration for use in your patient-education program. Build now for the future by outlining a definite educational program. Carry the program out month after month. Show your patients that neglect costs more than treatment, in pain, in time, and in money. TO HELP CONVINCE THEM, SHOW THEM. Patient-education material is an economical means of doing this.

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(*Continued from page* 194)

ing and will not depend on ours. Both the Germans and the Japs have been building meteorologic stations for years and have used their top-flight scientists to integrate the weather with military action. Thus the only ones hampered by wartime regulations on weather reports are our own people.

It would be helpful to our defense workers to know in advance what kind of weather is impending. Snow, frost, fogs create serious traffic hazards, and one of the major problems in our war production effort is the speeding up of traffic. Industries, plants, shipyards, and other production centers are frequently built in areas not planned to accommodate great increases in traffic which may thus present major hazards.

And certainly in the field of agriculture, accurate weather forecasting is important. We are told to plan Victory Gardens, but the important information regarding rainfall is not forthcoming. All gardeners realize that it is extremely necessary to know in advance of planting precisely the weather that may exist in the early succeeding days. A hard, driving rain will wash seeds away. Soft rains are desirable. Blistering sun on dry soil may actually destroy seeds.

Housewives find it difficult to plan their menus without knowing what kind of weather to anticipate. Extremely hot weather presents problems in food preservation.

Certainly it seems that the people along the Florida coast must be told long enough in advance regarding approaching hurricanes. In the Spring of the year the middlewesterners need to be informed of possible tornadoes in formation.

So far as our own field is concerned, dentists know, for example, that silicates mixed on a cold day are much more likely to be successful than those mixed on a very hot day. We know, likewise, that hydrocolloids behave better in cold weather than in extremely hot weather. And we are all familiar with the influence of meteorologic conditions on the blood vascular system.

It does seem that with some study of the consequences of weather restrictions, the Government might relax some of the regulations a bit.

Reunion in St. Louis . . .

The chairman of the Press and Publicity Committee, Otto C. Hermann, announces that the Annual Reunion of the Alumni Association of St. Louis University Dental School will be held in conjunction with the convention of the Missouri State Dental Association at the Jefferson Hotel in St. Louis, May 24-27. The Fall Mid-Continent Dental Congress is not to be held, so all the more reason for St. Louis University alumni to attend the Missouri State meeting in May.

Economics Again . . .

The Committee on Economics of the American Dental Association in cooperation with the Department of Commerce has sent out another questionnaire. The timing of this questionnaire was very poor. It came while most dentists were groaning under the load of income tax returns. It is a likely prediction that the returns of this question-

In your ORAL HYGIENE this month

HELP FOR YOU!

Did you know that there is an organization in Washington ready to help dentists diagnose unfamiliar pathologic oral lesions? Capt. Joseph L. Bernier tells about it in this month's ORAL HYGIENE. He is secretary and pathologist to the Registry upon which you may call for aid.

Did you ever classify the various types of spitters in your practice? Doctor Frank W. Hospers did, and has some fun with the result in April ORAL HYGIENE.

Do you know how the Army Medical Department (including the Dental Corps) is organized? This month, ORAL HYGIENE presents a two-page pictorial chart which tells the facts at a glance.

Did you ever remember someone for years after you last saw him? John W. Schaefle did. He remembered, with deep affection and respect, the dental officer attached to his outfit in World War I. "The Dentist Nobody Will Forget" is a heart-warming three pages.

Do you believe that the dental condition of American children is a national disgrace? Doctor Harlan H. Horner does; he is secretary of the Council on Dental Education of the A.D.A. Doctor George Schneider emphatically agrees with him—and tells why—in "A National Disgrace,"

Do you know anything about the possible effect, upon dental economy, of Federal planning? Peter T. Swanish discusses it in "This is YOUR Business."

And ORAL HYGIENE'S popular departments round out the April issue: Ask ORAL HYGIENE, Technique of the Month, Military and Defense News, Editorial Comment, Dentists in the News, Dear ORAL HYGIENE, Laffodontia, and The Publisher's Corner.

In your April

Oral Hygiene

naire will not be good, first, as has been said, because the timing was bad in sending it out, and second, because it is too inquisitive. When we are compelled to give information, such as on income tax returns, we may grumble, but we do it; but when we are asked to fill out a voluntary questionnaire, it has to be easy or we will relegate it to the wastebasket. This particular survey suffers from too much of the rhetorical touches of the income tax return; for example: "If you are in a complete partnership and wage and salary items are not separable, have only ONE member of the partnership fill out this section. If you follow this procedure, please indicate by having member who fills out partnership data check box at the left."

Here is another dilly: "Distribution of time for typical week. Total hours per week spent: a) Actually at chair; b) Laboratory; c) Vacant chair: d) Attending professional or dental education meetings." Note: " 'Vacant chair' time refers to time spent idle while waiting for patients."

We will all agree that a fair picture of the earnings of dentists as a group is a worthwhile piece of information. Special studies of this kind have been made before, but the questionnaires were of the utmost simplicity. It is regrettable that the people who compiled the questions for this new survey had to copy so assiduously the involved phraseology and the complexities of the income tax returns.

Endocrine Dysfunction . . .

It does not take much to throw the ductless glands out of their fine balance. When they are tipped out of function into hyperfunction or hypofunction, serious consequences result. In some of these states of dysfunction, teeth and jaws show disturbances. Serious periodontal disease is a common complication. The dentist should be given a red flag of warning, however, to make haste slowly about prescribing endocrine therapy. That should be entirely within the province of the internist, and often he, with his wider experience on the subject, will find himself in plenty of difficulty. Such a warning, refreshing in its good sense, is

sounded by Isaac Schour, D.D.S., Ph.D. of the Department of Histology of the University of Illinois College of Dentistry. Schour says, " . . . on the basis of our present knowledge, there is no indication for the prescription of endocrine therapy by the dentist; the physician should treat the endocrine dysfunction and the dentist, the dental disorder."

And while we are sounding warnings, here is another caution to observe: Don't monkey with the human occlusion too much in the wish to relieve certain neurologic conditions. Recently, for example, a dentist earnestly argued the case for the removal of the impacted third molars to relieve claustrophobia. The prying open of the bite to relieve migraine headache, and the paving of the occlusal surfaces with all sorts of materials to relieve deafness are a couple of other conditions requiring healthy skepticism in routine practice. This brand of skepticism is not being cynical, supercilious, or all-knowing. Skepticism is a weighing of evidence, a testing and inquiring, and patience in waiting for results. It is another way of advising the scientific outlook.—E. J. R.

DENTAL MEETING
Dates

Toledo Dental Centennial and Clinic Day, Secor Hotel, Toledo, Ohio, April 29.

•

Cleveland Dental Society, annual Spring Clinic, Statler Hotel, Cleveland, May 4-6.

•

New Jersey State Society, annual meeting. Ambassador Hotel, Atlantic City, May 6-8.

Tennessee State Dental Association, seventy-fifth annual meeting, Hotel Patten, Chattanooga, May 11-14.

•

Indiana State Dental Association, eighty-fifth annual meeting, Claypool Hotel, Indianapolis, May 18-20.

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Ontario Dental Association, seventy-fifth annual meeting, Royal York Hotel, Toronto, May 18-21.

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